

**REMARKS**

Claims 1-3 and 5-22 are all of the claims presently pending in the application.

Applicant has amended claims 1, 20, and 21 to define the claimed invention more particularly.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant gratefully acknowledges the Examiner's indication that claims 2 and 5 would be allowable if rewritten in independent form. Applicant respectfully submits, however, that all of claims 1-3 and 5-22 are allowable.

Claims 1-3, 5-19, and 22 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1, 3, 6-17, and 19-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Neill, et al. (U.S. Patent No. 6,464,266; hereinafter "O'Neill") in view of Attwood (U.S. Patent No. 4,911,406). Claims 1, 6-16, and 18-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ketcham (U.S. Patent No. 5,423,577) in view of Attwood.

Applicant respectfully traverses these rejections in accordance with the traversal arguments provided below.

**I. THE CLAIMED INVENTION**

The claimed invention of exemplary claim 1 provides a piping connector including a holding ring that includes a first end portion that faces toward the seal ring and that is fitted to

the inner periphery of the socket, a second end portion that is positioned opposite to the first end portion and that is fitted to the inner periphery of the socket, and a groove that is formed between the first end portion and the second end portion, and wherein the groove of the hold ring and the inner periphery of the socket define a space therebetween so that, when the hold ring is welded, a burr is confined within the space (e.g., see Application at page 3, lines 8-23). The claimed invention, including this feature, can be fixedly and solidly attached to an inner periphery of a socket without damaging a seal ring (e.g., see Application at page 3, lines 4-7).

Furthermore, when a groove is formed in an outer periphery of the hold ring, burrs produced when the hold ring is subjected to welding are stored inside of the groove and are prevented from flowing out to an outer portion thereof. Accordingly, burrs can be prevented from flowing out to the side of the seal ring to damage the seal (e.g., see Application at page 3, line 24 through page 4, line 9).

## **II. THE INDEFINITENESS REJECTION**

The Examiner alleges that the claimed invention of claims 1-3, 5-19, and 22 are indefinite. Specifically, the Examiner alleges that the term “ring-like” is indefinite.

Accordingly, Applicant has amended claim 1 to replace the term “ring-like” with the term “ring”.

## **III. THE PRIOR ART REFERENCES**

### **A. The Alleged Combination of O’Neill and Attwood**

The Examiner alleges that one of ordinary skill in the art would have combined O’Neill with Attwood to render obvious the claimed invention of claims 1, 3, 6-17, and 19-22.

Applicant respectfully submits, however, that the alleged combination of references does not teach or suggest each and every feature of the claimed invention.

That is, the alleged combination of references does not teach or suggest “*wherein the hold ring comprises: a first end portion that faces toward the seal ring and that is fitted to the inner periphery of the socket; a second end portion that is positioned opposite to the first end portion and that is fitted to the inner periphery of the socket; and a groove that is formed between the first end portion and the second end portion, and wherein the groove of the hold ring and the inner periphery of the socket define a space therebetween so that, when the hold ring is welded, a burr is confined within the space*”, as recited in exemplary claim 1, and somewhat similarly recited in exemplary claims 20 and 21.

In the claimed invention, the groove (e.g., 81; Applicant submits that reference numbers are merely provided for the Examiner’s aid in understanding the claimed invention and are not meant to limit the scope of the claimed invention in any manner) of the hold ring (e.g., 49) and the inner periphery of the socket (e.g., 40) define a space therebetween (e.g., see Application at Figure 1).

Accordingly, by the structure of the claimed invention, when the holding ring (e.g., 49) is welded, a burr is confined within the space (e.g., see Application at page 3, line 24 through page 4, line 49).

In stark contrast, in O’Neill, one end (e.g., left end in Figure 1) of the spacer bushing 18 is not fitted to the inner periphery of the housing 10. Therefore, a burr may contact the O-ring seal and damage the O-ring seal.

Therefore, Applicant submits that the alleged combination of references does not teach or suggest each and every feature of the claimed invention. Accordingly, Applicant

respectfully requests the Examiner to reconsider and withdraw this rejection.

**B. The Alleged Combination of Ketcham and Attwood**

The Examiner alleges that one of ordinary skill in the art would have combined Ketcham with Attwood to render obvious the claimed invention of claims 1, 6-16, and 18-22. Applicant submits, however, that the alleged combination of references does not teach or suggest each and every feature of the claimed invention.

That is, the alleged combination of references does not teach or suggest "*wherein the hold ring comprises: a first end portion that faces toward the seal ring and that is fitted to the inner periphery of the socket; a second end portion that is positioned opposite to the first end portion and that is fitted to the inner periphery of the socket; and a groove that is formed between the first end portion and the second end portion, and wherein the groove of the hold ring and the inner periphery of the socket define a space therebetween so that, when the hold ring is welded, a burr is confined within the space*

", as recited in exemplary claim 1, and somewhat similarly recited in exemplary claims 20 and 21.

Indeed, Ketcham does not teach or suggest welding the hold ring.

Furthermore, Attwood does not teach or suggest a space between the end bushing 28 and the cylindrical housing 12 (see Attwood at Figure 1).

Therefore, Applicant submits that the alleged combination of references does not teach or suggest each and every feature of the claimed invention. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection.

### III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-3 and 5-22, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. Applicant respectfully requests the Examiner to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, Applicant requests the Examiner to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

Applicant hereby authorizes the Commissioner to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

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Respectfully Submitted,

  
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Scott M. Tulino, Esq.  
Registration No. 48,317

Sean M. McGinn, Esq.  
Registration No. 34,386

**MCGINN INTELLECTUAL PROPERTY  
LAW GROUP, PLLC**  
8321 Old Courthouse Road, Suite 200  
Vienna, VA 22182-3817  
(703) 761-4100  
**Customer No. 21254**